SURGERY
PATCH SR*3.0*41

INSTALLATION GUIDE

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Department of Veterans Affairs
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Introduction

This patch introduces new functionality to the Surgery package, enabling the Surgery package to send Health Level 7 (HL7) messages to Commercial Off-The-Shelf (COTS) systems. Sites that do not need this new functionality now should still install the patch to keep the Veterans Health Information Systems and Technology Architecture (**V***IST***A**) Surgery software up to date, but do not have to perform the post-installation procedures until needed.

Pre-Installation Tasks

1. Interfaces over RS-232 ports will need the Information Resource Management (IRM) staff to add new device entries. Some sites have identified a need to add two, incoming and outgoing, devices to prevent message collision. Message collision can be an issue if the system cannot be adjusted for intermittent delay (read/acknowledgment) times. The **V***IST***A** HL7 package can be adjusted to prevent message collision by simply changing the default Read Timeout (3) and ACK Timeout (10). These times can be adjusted by using the Interface Workbench option from within the HL7 package. However, if adjusting the delay times does not fix the problem then it might be necessary to add a second device to prevent message collision. To add these entries, IRM should follow the sample in the Technical Information section of this document.
2. Interfaces over TCP/IP ports will need to identify the system's IP address and two available port numbers. The range of recommended port numbers is 5130 to 5139.

Installation Procedures

The routines and files contained in this release are exported as Surgery patch SR*3.0*41.

Step Description

1. This patch may be installed at any time with users remaining on the system. Installation should take less than one minute. (See Example Installation.)

2. Download the KIDS file SR_3_P41.KID from the anonymous.software directory at the CIOFO at Hines, Albany, or Salt Lake City to the appropriate directory on your system.

3. From the *Kernel Installation and Distribution System (KIDS) Menu* [XPD MAIN], select the *Installation* menu. Use the *Load a Distribution* [XPD LOAD DISTRIBUTION] option to load the distribution from the downloaded distribution file.

4. Use *Verify Checksums in Transport Global* [XPD PRINT CHECKSUM] option to confirm the patch for correctness.

5. Review your mapped set. If any of the following routines are mapped, remove them from the mapped set.

```
SRHLDW    SRHLDW1   SRHLENV   SRHLMFN   SRHLOORU  SRHLORU   SRHLPOST
SRHLPRE   SRHLQRY   SRHLSCRN  SRHLU     SRHLUI    SRHLUO    SRHLUO1
SRHLUO2   SRHLUO3   SRHLUO4   SRHLUO4C  SRHLVOOR  SRHLVORU  SRHLVQRY
SRHLVU    SRHLVUI   SRHLVUI2  SRHLVUO   SRHLVUO1  SRHLVUO2  SRHLVUO4
SRHLVZIU  SRHLVZQR  SRHLVZSQ  SRHLXTMP  SRHLZIU   SRHLZQR   SROCODE
SROERR    SROERR0   SROFILE   SRONITE   SRSCHD2
```

6. If you are a test site for this patch, use the *Stop LL*P [HL STOP] option under the HL7 *Communications Server Option* [HL COMMUNICATIONS SERVER] menu to stop any SR* lower level protocols (LLP). If you are not a test site for this patch, skip this step. If you are not sure, use the *Systems Link Monitor* option under the HL7 *Communications Server Option* [HL COMMUNICATIONS SERVER] to see if any SR* lower level protocols (LLP) that are actively running.

7. From the *Kernel Installation and Distribution System (KIDS) Menu* [XPD MAIN] menu, select the *Installation* [XPD INSTALLTION MENU] menu. Use the *Install Package(s)* [XPD INSTALL BUILD] option and select the package SR*3.0*41 and proceed with install. (See Example Installation.)

8. If any routines were unmapped as part of step 5, they should be returned to the mapped set once the installation has run to completion.

9. The checksum routine SR41NTEG may be run from programmer mode to confirm the integrity of the routines distributed with this patch. Afterwards, SR41NTEG may be deleted from the routine directory.

Example Installation

KIDS Step #1

```
Select Kernel Installation & Distribution System Option: Installation

Select Installation Option: Load a Distribution
Enter a Host File: SR_3_P41.KID

KIDS Distribution saved on Feb 24, 1998@09:49:54
Comment: SR*3*41 - Surgery HL7 Interface Patch

This Distribution contains Transport Globals for the following Package(s):
     SR*3.0*41

Want to Continue with Load? YES//  <RET>
Loading Distribution...

Want to RUN the Environment Check Routine? YES//  <RET>
   SR*3.0*41
Will first run the Environment Check Routine, SRHLENV


Checking the SURGERY HL7 Environment


Environment check was successful!!
Use INSTALL NAME: SR*3.0*41 to install this Distribution.
```

KIDS Step #2

```
Select Installation Option: Verify Checksums in Transport Global

Select INSTALL NAME: SR*3.0*41           Loaded from Distribution
2/24/98@10:07:53
     => SR*3*41 - Surgery HL7 Interface Patch  ;Created on Feb 24,
1998@09:49:
DEVICE: HOME//  <RET>   DECSERVER


PACKAGE: SR*3.0*41     Feb 24, 1998 10:08 am                        PAGE 1
-------------------------------------------------------------------------------



   40 Routine checked, 0 failed.
```

KIDS Step #3

```
Select Installation Option: Install Package(s)
Select INSTALL NAME: SR*3.0*41   Loaded from Distribution  2/24/98@10:07:
53
     => SR*3*41 - Surgery HL7 Interface Patch  ;Created on Feb 24,
1998@09:49:

This Distribution was loaded on Feb 24, 1998@10:07:53 with header of
```

```
SR*3*41 - Surgery HL7 Interface Patch  ;Created on Feb 24, 1998@09:49:54
It consisted of the following Install(s):
SR*3.0*41

   SR*3.0*41
Will first run the Environment Check Routine, SRHLENV

Checking the SURGERY HL7 Environment

Environment check was successful!!

Install Questions for SR*3.0*41

Incoming Files:


   133       SURGERY SITE PARAMETERS  (Partial Definition)
Note:  You already have the 'SURGERY SITE PARAMETERS' File.


   133.2     SURGERY INTERFACE PARAMETER  (including data)


Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES//  NO

Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME//  ;P-DEC  DECSERVER


 Install Started for SR*3.0*41 :
               Feb 24, 1998@10:09:25

 Installing Routines:.....................................
               Feb 24, 1998@10:09:27

 Running Pre-Install Routine: ^SRHLPRE.

Mail Group SRHL DISCREPANCY installed

 Installing Data Dictionaries: ...
               Feb 24, 1998@10:09:27

 Installing Data: .
               Feb 24, 1998@10:09:28

 Installing PACKAGE COMPONENTS:

 Installing HL LOWER LEVEL PROTOCOL PARAMETER.....

 Installing HL7 APPLICATION PARAMETER...

 Installing PROTOCOL.....................
  Located in the SR (SURGERY) namespace.
  Located in the SR (SURGERY) namespace.
  Located in the SR (SURGERY) namespace.
  Located in the SR (SURGERY) namespace.
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  Located in the SR (SURGERY) namespace.
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  Located in the SR (SURGERY) namespace.
  Located in the SR (SURGERY) namespace.
  Located in the SR (SURGERY) namespace.

 Installing OPTION......
               Feb 24, 1998@10:09:30

 Running Post-Install Routine: ^SRHLPOST.

Updating the HL LOWER LEVEL PROTOCOL PARAMETER file (#869.2)

     Adding SRAAISTSURGERY-TCP

Updating HL LOGICAL LINK file (#870).

     Adding SR AAIS

     Adding SR SURGERY

Updating the PROTOCOL file (#101) with the new TCP/IP connect

SURGERY HL7 SETUP IS COMPLETE.

 Updating Routine file......

 Updating KIDS files.......

 SR*3.0*41 Installed.
               Feb 24, 1998@10:09:31

Install Completed
```

Post-Installation Procedures

For applications that are not compatible with **V*IST*A** HL7 V. 1.6, this patch includes a form of the Surgery interface that is compatible with **V*IST*A** HL7 V.1.5. (Most applications by far should be compatible with **V*IST*A** HL7 V. 1.6.) Determine which form of the Surgery interface is appropriate and edit the site parameter that determines which Surgery HL7 interface will be used. Use the *Update Interface Parameter Field* [SRHL PARAMETER] option on the *Surgery Interface Management Menu* [SRHL INTERFACE] to update this parameter to YES if, and only if, the application interfacing with Surgery is NOT compatible with **V*IST*A** HL7 V. 1.6. Otherwise, enter NO or leave the field blank.

```
Select Surgery Package Management Menu Option: SI  Surgery Interface Management
Menu

Select Surgery Interface Management Menu Option: P  Update Interface Parameter
Field

This option may be used to edit the site parameter that determines which
Surgery HL7 interface will be used, the interface compatible with VISTA HL7
v1.6 or the older one compatible with VISTA HL7 v1.5.

If applications communicating with the Surgery HL7 interface must use the
interface designed for HL7 v1.5, enter YES.  Otherwise, enter NO or leave
this field blank.

Use Surgery Interface Compatible with VISTA HL7 v1.5 (Y/N): NO
```

If the Surgery interface that is compatible with **V*IST*A** HL7 V. 1.5 is being used, continue with the post-installation procedures for HL7 V.1.5. Otherwise, continue with the post-installation procedures for HL7 V. 1.6.

Post-Installation Procedures (HL7 V. 1.5)

For applications that are compatible only with **V*IST*A** HL7 V. 1.5, the following post-installation instructions apply.

1. Use the *Non-DHCP Application Parameter Enter/Edit* [HL EDIT SITE PARAM] option (on the *V. 1.5 OPTIONS* [HL MENU 1.5] menu on the *HL7 Main Menu* [HL7 MAIN MENU]) to define an HL7 device for SR AAIS.

2. Use the *Initiate Background Task* [HL TASK] option (on the *V. 1.5 OPTIONS* [HL MENU 1.5] menu on the *HL7 Main Menu* [HL MAIN MENU]) to create a background task to start up the lower level protocol routine for SR AAIS.

3. Using the option *Flag Interface Fields* [SRHL INTERFACE FIELDS], flag identifiers as appropriate to control the flow of data between the **V*IST*A** Surgery package and the ancillary system.

Post-Installation Procedures (HL7 V. 1.6)

For applications that are compatible with **V*IST*A** HL7 V. 1.6, the following post-installation instructions apply.

Using the *HL7 Interface Workbench* [HL INTERFACE WORKBENCH] option identify the Lower Level Protocol for your interface. Interfaces using a Hybrid Lower Level Protocol (HLLP) or an RS-232 port connection with one port for incoming and outgoing messages need to match the SR AAIS logical link with the SR HLLP LLP Parameter (option 1). Interfaces using an HLLP or an RS-232 port connection with two ports, incoming and outgoing, need to match the SR AAIS (shown in option 1) as well as SR SURGERY logical link with the SR HLLP2 LLP Parameter (option 2). The logical links that are used will also need to be linked to the devices setup in the Pre-Installation Instructions. Interfaces using the Minimal Lower Level Protocol (MLLP) or TCP/IP connections will need to match the SR AAIS logical link with the SRAAISTSURGERY-TCP LLP Parameter (option 3) as well as SR SURGERY logical link with the SRSURGERY-TCP-RECV LLP Parameter (option4). Once the SR AAIS and SR SURGERY logical links are matched up with the appropriate LLP Parameters, use VA FileMan to add the TCP/IP addresses and ports to the HL LOWER LEVEL PROTOCOL PARAMETER file (#869.2) entries. See option 5 for the appropriate FileMan setups for SRAAISTSURGERY-TCP and SRSURGERY-TCP-RECV entries.

OPTION 1

```
(10) SR AAIS
 LLP Parameter: SR HLLP
      LLP Type: HLLP  (H)                    Read Timeout: 3
        Device:                               ACK Timeout: <DEFAULT>
    Version ID: 2.2                Re-transmission Attempts: 3
    Block Size: <DEFAULT>             Start Block Character: <DEFAULT>
    Queue Size: <DEFAULT>               End Block Character: <DEFAULT>
```

OPTION 2

```
(10) SR SURGERY
 LLP Parameter: SR HLLP2
      LLP Type: HLLP  (H)                    Read Timeout: 3
        Device:                               ACK Timeout: <DEFAULT>
    Version ID: 2.2                Re-transmission Attempts: 3
    Block Size: <DEFAULT>             Start Block Character: <DEFAULT>
    Queue Size: <DEFAULT>               End Block Character: <DEFAULT>
```

OPTION 3

```
(9) SR AAIS                                          LLP is not supported by
 LLP Parameter: SRAAISTSURGERY-TCP                   the workbench.  FileMan
      LLP Type: TCP                                  must be used to fill in
    Queue Size: <DEFAULT>                            the LLP specific info.
```

OPTION 4

```
(10) SR SURGERY                                      LLP is not supported by
 LLP Parameter: SRSURGERY-TCP-RECV                   the workbench.  FileMan
```

```
      LLP Type: TCP                                  must be used to fill in
    Queue Size: <DEFAULT>                            the LLP specific info.
```

OPTION 5

```
NUMBER: 16                              NAME: SRAAISTSURGERY-TCP
  LLP TYPE: TCP                         TCP/IP ADDRESS: [REMOTE IP ADDRESS]
  TCP/IP PORT: [REMOTE PORT]            CLIENT/SERVER: CLIENT


NUMBER: 17                              NAME: SRSURGERY-TCP-RECV
  LLP TYPE: TCP                         TCP/IP ADDRESS: [LOCAL IP ADDRESS]
  TCP/IP PORT: [LOCAL PORT]             CLIENT/SERVER: SERVER
```

1. Confirm SR AAIS and SR SURGERY Application Entries

Confirm that the following Application entries were created by the KIDS install and add facility name and Mail Group (if needed).

```
   HL-7 Interface Workbench      Jun 19, 1997 15:05:48          Page:   15 of   16
                                  Currently Defined
                                    Applications

   (32) SR AAIS
    Facility Name:                                    Active/Inactive: ACTIVE
     Country Code: USA                             HL7 Field Separator: <DEFAULT>
       Mail Group:                               HL7 Encoding Characters: <DEFAULT>


   (33) SR SURGERY
    Facility Name:                                    Active/Inactive: ACTIVE
     Country Code: USA                             HL7 Field Separator: <DEFAULT>
       Mail Group:                               HL7 Encoding Characters: <DEFAULT>
```

For the above two (2) Application entries created by the KIDS install, edit and set the Facility Name and Mail Group fields. To do this, at the "Select Tool:Jump To Next App//" prompt, choose "EA Edit Application":

2. Confirm SR AAIS Server Protocol Entries

Confirm that the following Server Protocol entries were created by the KIDS install for the SR AAIS application:

```
HL-7 Interface Workbench      Jun 19, 1997 15:22:26          Page:    1 of    2
                              Server Protocols For
                                     SR AAIS

(1) SR Unsolicited transmission of AAIS Requested Observation
    Text: Unsolicited Transmission of Placer Surgery Observation
 Package: SURGERY
   Message Type Rcvd: ORU                     Accept Acknowledgement: <DEFAULT>
     Event Type Rcvd: R01                 Application Acknowledgement: <DEFAULT>
            Priority: <DEFAULT>
       Processing ID: PRODUCTION
          Version ID: 2.1
        Entry Action: <NONE>
         Exit Action: <NONE>
 Process ACK Routine:
 Subscribers: SR Receiver of Unsolicited Requested Observation

(2) SR Query for Scheduling Information
    Text: Query for Surgery Case Scheduling Information
 Package: SURGERY
   Message Type Rcvd: QRY                     Accept Acknowledgement: <DEFAULT>
     Event Type Rcvd: S25                 Application Acknowledgement: <DEFAULT>
            Priority: <DEFAULT>
       Processing ID: PRODUCTION
          Version ID: 2.1
        Entry Action: <NONE>
         Exit Action: <NONE>
 Process ACK Routine:
 Subscribers: SR Receiver of Scheduling Query
```

3. Confirm SR AAIS Client Protocol Entries

Confirm that the following Client Protocol entries were created by the KIDS install for the SR AAIS application:

```
HL-7 Interface Workbench      Jun 19, 1997 15:22:46          Page:    1 of    9
                              Client Protocols For
                                     SR AAIS

 (1) SR Receiver of Observation Unsolicited
    Text: Receiver of ORU
 Package: SURGERY
    Message Type Rcvd: ORU               Sending Facility Required: YES
    Message Type Sent: ACK             Receiving Facility Required: YES
 Event Type Rcvd/Sent: R01           Date/Time of Message Required: YES
             Priority: IMMEDIATE                  Security Required: <DEFAULT>
        Processing ID: PRODUCTION                      Logical Link: SR AAIS
           Version ID: 2.1
         Entry Action: <NONE>
          Exit Action: <NONE>
      Process Routine: D ^SRHLORU
```

```
(2) SR Receiver of New Appointment Booking
   Text: Receiver of New Surgery Appointment Booking
Package: SURGERY
   Message Type Rcvd: ACK                Sending Facility Required: YES
   Message Type Sent: ZIU              Receiving Facility Required: YES
Event Type Rcvd/Sent: S12            Date/Time of Message Required: YES
            Priority: IMMEDIATE                 Security Required: <DEFAULT>
       Processing ID: PRODUCTION                     Logical Link: SR AAIS
          Version ID: 2.1
        Entry Action: <NONE>
         Exit Action: <NONE>
     Process Routine: Q

(3) SR Receiver of Appointment Rescheduling
   Text: Receiver of Surgery Appointment Rescheduling
Package: SURGERY
   Message Type Rcvd: ACK                Sending Facility Required: YES
   Message Type Sent: ZIU              Receiving Facility Required: YES
Event Type Rcvd/Sent: S13            Date/Time of Message Required: YES
            Priority: IMMEDIATE                 Security Required: <DEFAULT>
       Processing ID: PRODUCTION                     Logical Link: SR AAIS
          Version ID: 2.1
        Entry Action: <NONE>
         Exit Action: <NONE>
     Process Routine: Q

(4) SR Receiver of Appointment Modification
   Text: Receiver of Surgery Appointment Modification
Package: SURGERY
   Message Type Rcvd: ACK                Sending Facility Required: YES
   Message Type Sent: ZIU              Receiving Facility Required: YES
Event Type Rcvd/Sent: S14            Date/Time of Message Required: YES
            Priority: IMMEDIATE                 Security Required: <DEFAULT>
       Processing ID: PRODUCTION                     Logical Link: SR AAIS
          Version ID: 2.1
        Entry Action: <NONE>
         Exit Action: <NONE>
     Process Routine: Q

(5) SR Receiver of Appointment Cancellation
   Text: Receiver of Surgery Appointment Cancellation
Package: SURGERY
   Message Type Rcvd: ACK                Sending Facility Required: YES
   Message Type Sent: ZIU              Receiving Facility Required: YES
Event Type Rcvd/Sent: S15            Date/Time of Message Required: YES
            Priority: IMMEDIATE                 Security Required: <DEFAULT>
       Processing ID: PRODUCTION                     Logical Link: SR AAIS
          Version ID: 2.1
        Entry Action: <NONE>
         Exit Action: <NONE>
     Process Routine: Q

(6) SR Receiver of Appointment Deletion
   Text: Receiver of Surgery Appointment Deletion
Package: SURGERY
   Message Type Rcvd: ACK                Sending Facility Required: YES
   Message Type Sent: ZIU              Receiving Facility Required: YES
Event Type Rcvd/Sent: S17            Date/Time of Message Required: YES
            Priority: IMMEDIATE                 Security Required: <DEFAULT>
       Processing ID: PRODUCTION                     Logical Link: SR AAIS
          Version ID: 2.1
        Entry Action: <NONE>
         Exit Action: <NONE>
     Process Routine: Q

(7) SR Receiver of Staff Master File Notification
   Text: Receiver of Surgery Staff Master File Notification
```

```
Package: SURGERY
   Message Type Rcvd: ACK                Sending Facility Required: YES
   Message Type Sent: MFN              Receiving Facility Required: YES
Event Type Rcvd/Sent: M02            Date/Time of Message Required: YES
           Priority: IMMEDIATE                 Security Required: <DEFAULT>
      Processing ID: PRODUCTION                     Logical Link: SR AAIS
         Version ID: 2.1
        Entry Action: <NONE>
         Exit Action: <NONE>
    Process Routine: Q

(8) SR Receiver of Master File Notification
   Text: Receiver of Master File Notification
Package: SURGERY
   Message Type Rcvd: ACK                Sending Facility Required: YES
   Message Type Sent: MFN              Receiving Facility Required: YES
Event Type Rcvd/Sent: M01            Date/Time of Message Required: YES
           Priority: IMMEDIATE                 Security Required: <DEFAULT>
      Processing ID: PRODUCTION                     Logical Link: SR AAIS
         Version ID: 2.1
        Entry Action: <NONE>
         Exit Action: <NONE>
    Process Routine: Q
```

4. Confirm SR SURGERY Server Protocol Entries

Confirm that the following Server Protocol entries were created by the KIDS install for the SR SURGERY application:

```
HL-7 Interface Workbench      Jun 19, 1997 15:31:34         Page:    1 of    9
                              Server Protocols For
                                   SR SURGERY

 (1) SR Unsolicited transmission of DHCP Requested Observation
    Text: Unsolicited Transmission of Filler Surgery Observation
 Package: SURGERY
   Message Type Rcvd: ORU                    Accept Acknowledgement: <DEFAULT>
     Event Type Rcvd: R01                Application Acknowledgement: <DEFAULT>
            Priority: <DEFAULT>
       Processing ID: PRODUCTION
          Version ID: 2.1
         Entry Action: <NONE>
          Exit Action: <NONE>
 Process ACK Routine:
 Subscribers: SR Receiver of Observation Unsolicited

 (2) SR Notification of Appointment Booking
    Text: Notification of New Surgery Appointment Booking
 Package: SURGERY
   Message Type Rcvd: ZIU                    Accept Acknowledgement: <DEFAULT>
     Event Type Rcvd: S12                Application Acknowledgement: <DEFAULT>
            Priority: <DEFAULT>
       Processing ID: PRODUCTION
          Version ID: 2.1
         Entry Action: <NONE>
          Exit Action: <NONE>
 Process ACK Routine: Q
 Subscribers: SR Receiver of New Appointment Booking

(3) SR Notification of Appointment Rescheduling
    Text: Notification of Surgery Appointment Rescheduling
 Package: SURGERY
```

```
  Message Type Rcvd: ZIU                    Accept Acknowledgement: <DEFAULT>
    Event Type Rcvd: S13                Application Acknowledgement: <DEFAULT>
           Priority: <DEFAULT>
      Processing ID: PRODUCTION
         Version ID: 2.1
       Entry Action: <NONE>
        Exit Action: <NONE>
Process ACK Routine: Q
Subscribers: SR Receiver of Appointment Rescheduling

(4) SR Notification of Appointment Modification
   Text: Notification of Surgery Appointment Modification
Package: SURGERY
  Message Type Rcvd: ZIU                    Accept Acknowledgement: <DEFAULT>
    Event Type Rcvd: S14                Application Acknowledgement: <DEFAULT>
           Priority: <DEFAULT>
      Processing ID: PRODUCTION
         Version ID: 2.1
       Entry Action: <NONE>
        Exit Action: <NONE>
Process ACK Routine: Q
Subscribers: SR Receiver of Appointment Modification

(5) SR Notification of Appointment Cancellation
   Text: Notification of Surgery Appointment Cancellation
Package: SURGERY
  Message Type Rcvd: ZIU                    Accept Acknowledgement: <DEFAULT>
    Event Type Rcvd: S15                Application Acknowledgement: <DEFAULT>
           Priority: <DEFAULT>
      Processing ID: PRODUCTION
         Version ID: 2.1
       Entry Action: <NONE>
        Exit Action: <NONE>
Process ACK Routine: Q
Subscribers: SR Receiver of Appointment Cancellation

(6) SR Notification of Appointment Deletion
   Text: Notification of Surgery Appointment Deletion
Package: SURGERY
  Message Type Rcvd: ZIU                    Accept Acknowledgement: <DEFAULT>
    Event Type Rcvd: S17                Application Acknowledgement: <DEFAULT>
           Priority: <DEFAULT>
      Processing ID: PRODUCTION
         Version ID: 2.1
       Entry Action: <NONE>
        Exit Action: <NONE>
Process ACK Routine: Q
Subscribers: SR Receiver of Appointment Deletion

(7) SR Other Master File Notification
   Text: Master File Update
Package: SURGERY
  Message Type Rcvd: MFN                    Accept Acknowledgement: <DEFAULT>
    Event Type Rcvd: M01                Application Acknowledgement: <DEFAULT>
           Priority: <DEFAULT>
      Processing ID: PRODUCTION
         Version ID: 2.1
       Entry Action: <NONE>
        Exit Action: <NONE>
Process ACK Routine: Q
Subscribers: SR Receiver of Master File Notification

(8) SR Staff Master File Notification
   Text: Surgery Staff Master File Notification
Package: SURGERY
  Message Type Rcvd: MFN                    Accept Acknowledgement: <DEFAULT>
    Event Type Rcvd: M02                Application Acknowledgement: <DEFAULT>
```

```
            Priority: <DEFAULT>
          Processing ID: PRODUCTION
             Version ID: 2.1
           Entry Action: <NONE>
            Exit Action: <NONE>
   Process ACK Routine: Q
   Subscribers: SR Receiver of Staff Master File Notification
```

5. Confirm SR SURGERY Client Protocol Entries

Confirm that the following Client Protocol entries were created by the KIDS install for the SR SURGERY application:

Note: The SR SURGERY client protocols logical links for a HLLP, two device, setup will need to be changed to SR SURGERY all others will remain as distributed by the KIDS build.

```
HL-7 Interface Workbench      Jun 19, 1997 15:45:05          Page:    1 of    2
                              Client Protocols For
                                   SR SURGERY

 (1) SR Receiver of Unsolicited Requested Observation
    Text: Receiver of Unsolicited Requested Observation
 Package: SURGERY
    Message Type Rcvd: ORU                 Sending Facility Required: YES
    Message Type Sent: ACK               Receiving Facility Required: YES
 Event Type Rcvd/Sent: R01             Date/Time of Message Required: YES
             Priority: IMMEDIATE                 Security Required: <DEFAULT>
       Processing ID: PRODUCTION                      Logical Link: SR AAIS
          Version ID: 2.1
         Entry Action: <NONE>
          Exit Action: <NONE>
     Process Routine: D ^SRHLORU

(2) SR Receiver of Scheduling Query
    Text: Receiver of Surgery Case Query
 Package: SURGERY
    Message Type Rcvd: QRY                 Sending Facility Required: NO
    Message Type Sent: ZSQ               Receiving Facility Required: NO
 Event Type Rcvd/Sent: S25             Date/Time of Message Required: YES
             Priority: IMMEDIATE                 Security Required: <DEFAULT>
       Processing ID: PRODUCTION                      Logical Link: SR AAIS
          Version ID: 2.1
         Entry Action: <NONE>
          Exit Action: <NONE>
     Process Routine: D ^SRHLQRY
```

6. Confirm Logical Links for HLLP

Confirm that the following Logical Link entries were created by the KIDS install:

```
HL-7 Interface Workbench      Jun 19, 1997 15:58:43          Page:    7 of    7
                               Currently Defined
                                 Logical Links

(11) SR AAIS
 LLP Parameter: SR HLLP
      LLP Type: HLLP  (H)                                Read Timeout: 3
        Device:                                           ACK Timeout: <DEFAULT>
    Version ID: 2.2                                Re-transmission Attempts: 3
    Block Size: <DEFAULT>                             Start Block Character: <DEFAULT>
    Queue Size: <DEFAULT>                               End Block Character: <DEFAULT>

(12) SR SURGERY      {NOTE : SR SURGERY is only used in a two device HLLP setup}
 LLP Parameter: SR HLLP2
      LLP Type: HLLP  (H)                                Read Timeout: 3
        Device:                                           ACK Timeout: <DEFAULT>
    Version ID: 2.2                                Re-transmission Attempts: 3
    Block Size: <DEFAULT>                             Start Block Character: <DEFAULT>
    Queue Size: <DEFAULT>                               End Block Character: <DEFAULT>
```

7. Confirm Logical Links for TCP/IP

```
(9) SR SURGERY                                        LLP is not supported by
 LLP Parameter: SRSURGERY-TCP-RECV                    the workbench.  FileMan
      LLP Type: TCP                                   must be used to fill in
    Queue Size: <DEFAULT>                             the LLP specific info.


(10) SR AAIS                                          LLP is not supported by
 LLP Parameter: SRAAISTSURGERY-TCP                    the workbench.  FileMan
      LLP Type: TCP                                   must be used to fill in
    Queue Size: <DEFAULT>                             the LLP specific info.
```

8. Edit SR AAIS and SR SURGERY Logical Link Device Field

At the "Select Tool:Jump To Next Link//" prompt choose the "EL Edit Logical Link". Add the device that your IRM created in the Pre-Installation Tasks section of the installation to the device field of the SR AAIS logical link.

```
Select Tool:Jump To Next Link// El      Edit Logical Link
Select Logical Link (1-12): 11

Logical Link information
------------------------
Queue Size: <RET>
LLP Parameter: SR HLLP//  <RET>

LLP Parameters
--------------
LLP Type: HLLP//  <RET>
Device:          ← Enter the device that associates with the port that HL7 used
                 to connect to the COTS system. For more information about
                 setting up and activating this device, see Additional Technical
```

```
                Information section.
Version ID: 2.2//  <RET>
Block Size: <RET>
Read Timeout: 3//  <RET>
ACK Timeout: <RET>
Re-transmission Attempts: 3//  <RET>
Start Block Character: <RET>
End Block Character: <RET>...........
```

At the "Select Tool:Jump To Next Link//" prompt choose the "EL Edit Logical Link". Add the device that your IRM created in the Pre-Installation Tasks section of the installation to the device field of the SR SURGERY logical link.

```
Select Tool:Jump To Next Link// El      Edit Logical Link
Select Logical Link (1-12): 12

Logical Link information
------------------------
Queue Size: <RET>
LLP Parameter: SR HLLP2//  <RET>

LLP Parameters
--------------
LLP Type: HLLP//  <RET>
Device:          ← Enter the device that associates with the port that HL7 used
                 to connect to the COTS system. For more information about
                 setting up and activating this device, see Additional Technical
                 Information section.
Version ID: 2.2//  <RET>
Block Size: <RET>
Read Timeout: 3//  <RET>
ACK Timeout: <RET>
Re-transmission Attempts: 3//  <RET>
Start Block Character: <RET>
End Block Character: <RET>...........
```

9. Start LLP(s)

Use the HL7 Main Menu [HL MAIN MENU] option to start the LLP for entry SR AAIS and SR SURGERY:

For a one port/device HLLP connection, start SR AAIS.

```
Select Systems Manager Menu Option: HL7 Main Menu

Select HL7 Main Menu Option: 2  V1.6 OPTIONS

Select V1.6 OPTIONS Option: 1  Communications Server

Select Communications Server Option: 4   Start LLP
This option is used to launch the lower level protocol for the
Appropriate device.  Please select the node with which you want
to communicate
Select HL LOGICAL LINK NODE: SR AAIS
Select one of the following:
```

```
          F         FOREGROUND
          B         BACKGROUND
          Q         QUIT

Method for running the receiver: B// <RET> ACKGROUND
Job was queued as 16655.
```

For a two port/device HLLP or MLLP (TCP/IP) connection, start SR SURGERY.

```
Select Communications Server Option: 4  Start LLP
This option is used to launch the lower level protocol for the
appropriate device.  Please select the node with which you want
to communicate
Select HL LOGICAL LINK NODE: SR SURGERY
Select one of the following:

          F         FOREGROUND
          B         BACKGROUND
          Q         QUIT

Method for running the receiver: B// <RET> ACKGROUND
Job was queued as 16658.
```

10. Flag Interface Fields

Using the option *Flag Interface Fields* [SRHL INTERFACE FIELDS], flag identifiers as appropriate to control the flow of data between the **V***IST***A** Surgery package and the ancillary system.

Additional Technical Information

New Protocol File (# 101) Entries

SR Unsolicited transmission of AAIS Requested Observation
SR Query for Scheduling Information
SR Receiver of Observation Unsolicited
SR Receiver of New Appointment Booking
SR Receiver of Appointment Rescheduling
SR Receiver of Appointment Modification
SR Receiver of Appointment Cancellation
SR Receiver of Appointment Deletion
SR Receiver of Master File Notification
SR Receiver of Staff Master File Notification
SR Unsolicited transmission of VISTA Requested Observation
SR Notification of Appointment Booking
SR Notification of Appointment Rescheduling
SR Notification of Appointment Modification
SR Notification of Appointment Cancellation
SR Notification of Appointment Deletion
SR Staff Master File Notification
SR Other Master File Notification
SR Receiver of Unsolicited Requested Observation
SR Receiver of Scheduling Query

New HL7 NON-DHCP APPLICATION PARAMETER (# 770) Entry

SR AAIS

New HL7 APPLICATION PARAMETER (# 771) Entries

SR AAIS
SR SURGERY

New LOGICAL LINKS Entries

SR AAIS
SR SURGERY

New MAIL GROUP (#3.8) Entry

SRHL DISCREPANCY

New/Modified Routines

SRHLDW	SRHLDW1	SRHLENV	SRHLMFN	SRHLOORU	SRHLORU	SRHLPOST
SRHLPRE	SRHLQRY	SRHLSCRN	SRHLU	SRHLUI	SRHLUO	SRHLUO1
SRHLUO2	SRHLUO3	SRHLUO4	SRHLUO4C	SRHLVOOR	SRHLVORU	SRHLVQRY
SRHLVU	SRHLVUI	SRHLVUI2	SRHLVUO	SRHLVUO1	SRHLVUO2	SRHLVUO4
SRHLVZIU	SRHLVZQR	SRHLVZSQ	SRHLXTMP	SRHLZIU	SRHLZQR	SROCODE
SROERR	SROERR0	SROFILE	SRONITE	SRSCHD2		

New Field in SURGERY SITE PARAMETERS File #133

HL7 V. 1.5 COMPATIBLE (34)

If applications communicating with the Surgery HL7 interface must use the interface designed for use with HL7 V. 1.5, enter YES. Otherwise, enter NO or leave this field blank.

New File

SURGERY INTERFACE PARAMETER file (#133.2)

The Surgery package uses this file for its HL7 interface with **V*IST*A** and Non-**V*IST*A** packages or systems. The file acts as a mapping and processing tool for receiving information from other applications and transmitting information from the Surgery package. This file is exported with data. The global root is "^SRO(133.2,".

New Options

File Download [SRHL DOWNLOAD INTERFACE FILES]

This option is used to download Surgery interface files to the Automated Anesthesia Information System (AAIS). The process is currently being done by a screen capture to a file. In the future, this will be changed to a background task that can be queued to send HL7 master file updates.

Table Download [SRHL DOWNLOAD SET OF CODES]

This option downloads the SURGERY file (#130) set of codes to the Automated Anesthesia Information System (AAIS). This process is currently being done by a screen capture to a file. In the future, this will be changed to a background task that can be queued to send HL7 master file updates.

Surgery Interface Management Menu [SRHL INTERFACE]

This menu contains options that allow the user to set up certain interface parameters that control the processing of HL7 messages. The interface adheres to the Health Level 7 (HL7) protocol and forms the basis for the exchange of health care information between the **V*IST*A** Surgery package and any ancillary system.

Flag Interface Fields [SRHL INTERFACE FLDS]

This option allows the package coordinator to set the INTERFACE field in the SURGERY INTERFACE file (#133.2). The categories listed on the first screen correspond to entries in File 133.2. These categories are listed in the Surgery Interface Specifications document as being the OBR (OBservation Request) text identifiers. Each identifier corresponds to several fields in the **V*IST*A** Surgery package. This allows the user to control the flow of data between the **V*IST*A** Surgery package and the ancillary system on a field by field basis.

The option lists each identifier and its current setting. To receive the data coming from the ancillary system for a category, set the flag to R for receive. To ignore the data, set the flag to N for not receive. To see a second underlying layer of OBX text identifiers (SURGERY file #130 fields) and their settings, set the OBR text identifier to R for receive. The option will allow the user to toggle the settings for a range or for individual items.

Update Interface Parameter Field [SRHL PARAMETER]

This option may be used to edit the site parameter that determines which Surgery HL7 interface will be used, the interface compatible with **V*IST*A** HL7 V. 1.6 or the older one compatible with **V*IST*A** HL7 V. 1.5.

If applications communicating with the Surgery HL7 interface must use the interface designed for use with HL7 V. 1.5, enter YES. Otherwise, enter NO or leave this field blank.

Modified Options

Make Operation Requests [SROOPREQ]
Schedule Requested Operations [SRSCHD1]
Schedule Unrequested Operations [SROSRES]
Schedule Unrequested Concurrent Cases [SRSCHDC]
Cancel Scheduled Operation [SRSCAN]
Operation Information [SROMEN-OPINFO]
Surgical Staff [SROMEN-STAFF]
Operation Startup [SROMEN-START]
Operation [SROMEN-OP]
Post Operation [SROMEN-POST]
Operation (Short Screen) [SROMEN-OUT]
Surgeon's Verification of Diagnosis & Procedures [SROVER]
Anesthesia Information (Enter/Edit) [SROMEN-ANES]
Edit Non-O.R. Procedure [SRONOP-EDIT]
Flag Drugs for Use as Anesthesia Agents [SROCODE]
Update Site Configurable Files [SR UPDATE FILES]
Operation Information (Enter/Edit) [SROA OPERATION DATA]

Example V*ISTA* Device File Entries

```
NAME: HL7 PORT                              $I: _LTA9048:
 LOCATION OF TERMINAL: VISTA HL7 device     MARGIN WIDTH: 255
 FORM FEED: #                               PAGE LENGTH: 256
 BACK SPACE: $C(8)                          SUBTYPE: P-OTHER
 TYPE: TERMINAL                             LAT SERVER PORT: LC-3-16
 LAT SERVER NODE: DSV10

NAME: NULL DEVICE                           $I: _NLA0:
 LOCATION OF TERMINAL: null device          MARGIN WIDTH: 255
 FORM FEED: #                               PAGE LENGTH: 256
 BACK SPACE: $C(8)                          SUBTYPE: P-OTHER
 TYPE: TERMINAL
```